

Texas Commission on Environmental Quality



Permit For
Municipal Solid Waste (MSW) Management Facility
Issued under provisions of Texas
Health and Safety Code
Chapter 361

MSW Permit No.: 2378
Name of Site Operator/Permittee: Post Oak Clean Green, Inc.
Property Owner: K4 Ranches
Facility Name: Post Oak Municipal Solid Waste Landfill
Facility Address: 7787 Farm to Market Road 1150
Seguin, Texas 78155
Classification of Site: Type I Municipal Solid Waste Management Facility

The permittee is authorized to store, process, and dispose of wastes in accordance with the limitations, requirements, and other conditions set forth herein. This permit is granted subject to the rules and orders of the Commission and laws of the State of Texas and it replaces any previously issued permit. Nothing in this permit exempts the permittee from compliance with other applicable rules and regulations of the Texas Commission on Environmental Quality. This permit will be valid until canceled, amended, or revoked by the Commission.

Approved, Issued and Effective in accordance with Title 30 Texas Administrative Code, Chapter 330.

Issued Date: 10/23/18


For the Commission

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I. Size and Location of Facility

- A. The Post Oak Municipal Solid Waste Landfill is located in Guadalupe County, Texas 12.1 miles east of Seguin at 7787 Farm to Market Road 1150. The most commonly used route to the proposed facility would be from I-10, south about 1.2 miles on FM 1104 (Dix Road) to FM 1150, then east about 1.0 mile on FM 1150 to the facility entrance. The facility contains approximately 1,003 acres, of which 331 would be used for waste disposal.
- B. The legal description is contained in Part I, Attachment 1 of the application, which is incorporated by reference in Attachment A of this permit.
- C. Coordinates and Elevation of Site Permanent Benchmark:
- | | |
|------------|-------------------------------|
| Latitude: | N 29.60520° |
| Longitude: | W 97.72440° |
| Elevation: | 460 feet above mean sea level |

II. Facilities and Operations Authorized

A. Days and Hours of Operation

The waste acceptance hours for the receipt and disposal of waste at this facility shall be 24 hours per day, seven days per week. The operating hours at this landfill, which include the use of heavy equipment, shall be 24 hours per day, seven days per week.

The operator shall post the actual operating hours on the site sign.

B. Wastes Authorized at This Facility

The permittee is authorized to dispose of municipal solid waste resulting from, or incidental to, municipal, community, commercial, institutional, recreational and industrial activities, including garbage, putrescible wastes, rubbish, ashes, brush, street cleanings, dead animals, abandoned automobiles, construction-demolition waste, yard waste, Class 2 non-hazardous industrial solid waste, Class 3 non-hazardous industrial solid waste, and special waste. The acceptance of the special wastes is contingent upon such waste being handled in accordance with 30 TAC §330.171, and in accordance with the procedures listed and described in Part IV of the application, which is incorporated by reference in Attachment A of this permit, subject to the limitations and special provisions provided herein.

C. Wastes Prohibited at This Facility

The permittee shall comply with the waste disposal prohibitions set forth in 30 TAC §330.15(e). The permittee shall not accept Class 1 nonhazardous industrial solid waste, regulated hazardous waste, liquid waste, or any other waste not identified in Section II.B. of this permit.

D. Waste Acceptance Rate

Solid waste may be accepted for disposal at this facility at the initial rate of approximately 300,000 tons per year (approximately 1,150 tons per day based on 260 days per year of operation) and increasing over time to a maximum acceptance rate of approximately 710,000 tons per year (approximately 2,700 tons per day based on 260 days per year of operation). The actual yearly waste acceptance rate is a rolling quantity based on the sum of the previous four quarters of waste acceptance.

E. Waste Volume Available for Disposal

The total waste disposal capacity of the landfill (including waste and daily cover) is 87 million cubic yards.

F. Facilities Authorized

The permittee is authorized to operate a Type I municipal solid waste landfill with a total permit boundary encompassing approximately 1,003 acres, of which approximately 331 acres are the waste disposal footprint. The permittee is also authorized to operate a recyclables, used oil, and lead battery storage area; a scrap tire storage area; a large items and white goods storage area; a reusable materials staging area; and a citizens convenience area.

All waste disposal activities authorized by this permit are to be confined to the Type I landfill unit. Other units and structures associated with the landfill unit include access roads, scales, gatehouse, dikes, berms and temporary drainage channels, permanent drainage structures, detention ponds, landfill gas management system, contaminated water management system, leachate management system (including leachate evaporation ponds), final cover, groundwater monitoring system, a liner system, and other improvements.

All waste storage and processing activities authorized by this permit are to be confined to the locations depicted in Figure 20 in Part II of the permit application or as described in Part IV of the permit application. Used oil storage must meet the requirements of 30 TAC Chapter 324. Lead battery storage must meet the requirements of 30 TAC Chapter 328, Subchapter C.

G. Changes, Additions, or Expansions

Any proposed facility changes must be authorized in accordance with the rules in 30 TAC Chapters 305 and 330.

III. Facility Design, Construction, and Operation

- A.** Facility design, construction, and operation and maintenance must comply with the provisions of this permit; Commission Rules, including but not limited to 30 TAC Chapter 330; special provisions contained in this permit; and Parts I through IV of the permit application incorporated by reference in Attachment A of this permit; amendments, corrections, and modifications incorporated by

reference in Attachment B. The facility construction and operation shall be managed in a manner that protects human health and the environment.

- B. The entire waste management facility shall be designed, constructed, operated, and maintained to prevent the release and migration of any waste, contaminant, or pollutant beyond the point of compliance as defined in 30 TAC §330.3 and to prevent inundation or discharge from the areas surrounding the facility components. Each receiving, storage, processing, and disposal area shall have a containment system that will collect spills and incidental precipitation in such a manner as to:
 - 1. Preclude the release of any contaminated runoff, spills, or precipitation;
 - 2. Prevent washout of any waste by a 100-year frequency flood; and
 - 3. Prevent run-on into the disposal areas from off-site areas.
- C. The site shall be designed and operated so as not to cause a violation of:
 - 1. The requirements of §26.121 of the Texas Water Code;
 - 2. Any requirements of the Federal Clean Water Act, including, but not limited to, the National Pollutant Discharge Elimination System (NPDES) requirements of §402, as amended, and/or the Texas Pollutant Discharge Elimination System (TPDES), as amended;
 - 3. The requirements under §404 of the Federal Clean Water Act, as amended; and
 - 4. Any requirement of an area wide or statewide water quality management plan that has been approved under §208 or §319 of the Federal Clean Water Act, as amended.
- D. Management of Contaminated Water, Leachate, and Gas Condensate
 - 1. All contaminated water, including leachate, condensate, and water that has contacted waste, shall be handled, stored, treated, disposed of, and managed in accordance with 30 TAC §§ 330.65(c), 330.177, 330.207, 330.305(g), 330.333, as applicable, and the permit application incorporated by reference in Attachment A of this permit.
 - 2. Contaminated surface water and groundwater shall not be placed in or on disposed waste in the landfill.
- E. Liner System
 - 1. A liner system pursuant to 30 TAC §330.331 must be installed in all cells. Two liner designs are authorized: a system including a composite liner and a system including an alternative liner. The liner system shall be

constructed in accordance with the rules and the specifications in Part III, Attachment 3, Figure 3-9 in the application. The composite liner system must consist of, from top to bottom, 2 feet of protective cover, a geocomposite drainage layer, a 60-mil high-density polyethylene (HDPE) geomembrane, and two feet of compacted clay with a hydraulic conductivity of no more than 10^{-7} centimeters per second (cm/s). The alternative liner system replaces the compacted clay layer in the composite system with a geosynthetic clay liner.

2. The liner system shall be installed over the entire bottom and sidewalls as described in Part III, Attachment 3, Appendix 3D of the application.
3. The elevation of deepest excavation at the landfill disposal area is 415 feet above msl, and is located within a 3-foot-deep leachate collection sump.
4. The elevations of the bottom of the excavations within the waste disposal areas shall be as shown in Figure 18 in Part II of the application.

F. Final Cover System

1. A final cover system pursuant to 30 TAC Chapter 330 Subchapter K must be installed over all waste placed in landfill cells. The final cover system shall be constructed in accordance with the rules and the specifications in Part III, Attachment 3, Appendix 3D of the application, and must consist of, from top to bottom, 2 feet of protective cover (of which the top six inches are suitable to sustain native plants), a geocomposite drainage layer, a 40-mil linear, low-density polyethylene (LLDPE) geomembrane, and 18 inches of compacted clay with a hydraulic conductivity of no more than 10^{-5} cm/s.
2. The maximum elevation of the final cover shall not exceed 691.8 feet above msl.
3. Best management practices for temporary erosion and sedimentation control shall remain in place until sufficient vegetative cover has been established to control and mitigate erosion on areas having final cover. Vegetative cover will be monitored and maintained throughout the post-closure care period in accordance with the Post Closure Care Plan.

G. Waste Placement

1. The lowest elevation of waste placement will be approximately 420 feet above mean sea level (msl).
2. The maximum final elevation of waste placement will be 688.3 feet above msl.

H. Landfill Gas Management System

1. A landfill gas management system to monitor and control methane gas, pursuant to 30 TAC Chapter 330, Subchapter I, shall be installed and operated at the landfill. The landfill gas monitoring system shall consist of a perimeter network of landfill gas monitoring probes and landfill gas monitoring equipment for facility structures. The landfill gas monitoring probes and landfill gas control system shall be located as illustrated in Part III, Attachment 6, Figure 6-1 of the application. The landfill gas monitoring and control systems shall be designed, installed, and operated as described in Part III, Attachment 6 of the application and consistent with applicable rules. At a minimum, landfill gas monitoring shall be conducted on a quarterly basis.
2. The landfill gas management system shall ensure that the concentration of methane gas generated by the facility does not exceed 5% by volume in monitoring points, probes, subsurface soils, and does not exceed 1.25% by volume in facility structures (excluding gas control or recovery system components). If methane gas levels exceeding the limits specified herein are detected, the owner or operator shall follow and implement the notification and mitigation provision described under 30 TAC §330.371(c) to ensure continuous protection of human health and the environment.

I. Groundwater Monitoring System

1. The groundwater monitoring system shall be installed and shall consist of a sufficient numbers of monitoring wells to monitor the quality of groundwater in the uppermost aquifer in accordance with 30 TAC §330.403. The system shall be designed, constructed, and operated in accordance with Part III, Attachment 5 of the application and consistent with the applicable rules.
2. Monitoring wells shall be sampled in accordance with 30 TAC §330.407. The frequency of groundwater sampling and reporting of data collected for each sampling event shall be in accordance with 30 TAC §330.405 and Part III, Attachment 5 of the application.

J. Landfill Markers

Landfill markers shall be installed and maintained in accordance with 30 TAC §330.143 and as described within Part IV, Section 11.0 of the application.

- K. Storm water runoff from the active portion(s) of the landfill shall be managed in accordance with 30 TAC §§330.63(c), 330.301 through 330.307, and 330.165(c), and as described in Part III, Attachment 2 of the application.

- L. The permittee shall comply with 30 TAC §330.59(f) (3) regarding employment of a licensed solid waste facility supervisor. The permittee shall ensure that landfill personnel are familiar with safety procedures, contingency plans, requirements of

the Commission's rules and this permit, commensurate with their levels and positions of responsibility as described in Part IV, Section 3.4 of the permit application. All facility employees and other persons involved in facility operations shall obtain the appropriate level of training or certification as required by applicable regulations.

- M. The facility shall be properly supervised to assure that the attraction of birds does not cause a significant hazard to low-flying aircraft and that appropriate control procedures will be followed. Any increase in bird activity that might be hazardous to safe aircraft operations will require prompt mitigation actions.

IV. Financial Assurance

- A. Authorization to operate the facility is contingent upon compliance with provisions contained within this permit and maintenance of financial assurance in accordance with 30 TAC Chapter 330 Subchapter L and 30 TAC Chapter 37.
- B. Within 60 days prior to the initial receipt of waste, the permittee shall provide financial assurance instrument(s) for demonstration of closure in an amount not less than \$3,310,349 (2014 dollars). This cost addresses construction in the first year of operation. The cost estimate and financial assurance instruments will be reviewed annually and updated, as necessary, to address changes during development, including changes to the largest area requiring closure.
- C. Within 60 days prior to the initial receipt of waste, the permittee shall provide financial assurance instrument(s) for demonstration of post-closure care of the landfill in an amount not less than \$8,141,148 (2014 dollars). This cost addresses construction in the first year of operation. The cost estimate and financial assurance instruments will be reviewed annually and updated, as necessary, to address changes during development, including changes to the largest area requiring post-closure care.
- D. The permittee shall annually adjust the closure and/or post-closure care cost estimates for inflation within 60 days prior to the anniversary date of the establishment of the financial assurance instrument pursuant to 30 TAC §§330.503 and 330.507, as applicable.
- E. If the facility's closure and/or post-closure care plan is modified the permittee shall provide new cost estimates in current dollars in accordance with 30 TAC §§330.503, 330.463(b)(3)(D), and 330.507, as applicable. The amount of the financial assurance mechanism shall be adjusted within 45 days after the modification is approved. Adjustments to the cost estimates and/or the financial assurance instrument to comply with any financial assurance regulation that is adopted by the TCEQ subsequent to the issuance of this permit shall be initiated as a modification within 30 days after the effective date of the new regulation.

V. Facility Closure

Closure of the facility shall commence:

- A. Upon the landfill being filled to its permitted waste disposal capacity or upon the landfill reaching its permitted maximum waste elevation;
- B. Upon direction by the Executive Director of the TCEQ for failure to comply with the terms and conditions of this permit or violation of State or Federal regulations. The Executive Director is authorized to issue emergency orders to the permittee in accordance with §§5.501 and 5.512 of the Water Code regarding this matter after considering whether an emergency requiring immediate action to protect the public health and safety exists;
- C. Upon abandonment of the site by the permittee;
- D. Upon direction by the Executive Director of the TCEQ for failure to secure and maintain an adequate bond or other acceptable financial assurance instrument as required; or
- E. Upon the permittee's notification to the TCEQ that the landfill will cease to accept waste and no longer operate.

VI. Facility Post-Closure Care

- A. Upon completion and closure of the landfill, post-closure care shall be conducted in accordance with 30 TAC §330.463 and as described in Part III, Attachment 8 of the application for a period of 30 years following written acceptance of the certification of final closure by the Executive Director of the TCEQ.
- B. The vegetation on the final cover must be monitored and maintained throughout the post-closure care period.
- C. Following completion of the post-closure care period, the owner or operator shall submit to the Executive Director for review and approval a documented certification prepared by an independent professional engineer licensed in the State of Texas in accordance with 30 TAC §330.465.
- D. Upon written acceptance of the certification of completion of post closure care by the Executive Director of the TCEQ, the permittee shall submit to the Executive Director a request for voluntary revocation of this permit.

VII. Standard Permit Conditions

- A. This permit is based on and the permittee shall follow the permit application submittals dated December, 28, 2011, and revisions dated April 21, 2012; July 24, 2012; October 2, 2012; December 6, 2012; January 31, 2013; March 14, 2013; March 18, 2013; March 27, 2013; October 11, 2013; April 21, 2014; April 23, 2014; August 15, 2014; and December 4, 2014. These application submittals are hereby approved subject to the terms of this permit, the rules and regulations, and any orders of the TCEQ. These application materials are incorporated into this permit by reference in Attachment A as if fully set out herein. Any and all revisions to these elements shall become conditions of this permit upon the date of approval

by the Commission. The permittee shall maintain the application and all supporting documentation at the facility and make them available for inspection by TCEQ personnel. The contents of Part III of Attachment A of this permit shall be known as the "Approved Site Development Plan" in accordance with 30 TAC §330.63. The contents of Part IV of Attachment A of this permit shall be known as the "Approved Site Operating Plan" in accordance with 30 TAC §330.65 and 30 TAC Chapter 330, Subchapters D and E.

- B. Attachment B, consisting of amendments, modifications, and corrections to this permit, is hereby made a part of this permit.
- C. The permittee shall comply with all conditions of this permit. Failure to comply with any permit condition may constitute a violation of the permit, the rules of the Commission, and the Texas Solid Waste Disposal Act, and is grounds for an enforcement action, revocation, or suspension.
- D. A pre-construction conference shall be held pursuant to 30 TAC §330.73(c) prior to beginning physical construction of the facility to ensure that all aspects of this permit, construction activities, and inspections are met. Additional pre-construction conferences may be held prior to the opening of the facility.
- E. A pre-opening inspection shall be held pursuant to 30 TAC §330.73(e). The facility shall not accept solid waste until the executive director has confirmed in writing that all applicable submissions required by the permit and applicable rules have been received and found to be acceptable and that construction is in compliance with the permit and the approved site development plan.
- F. The permittee shall monitor sediment accumulation in ditches and culverts on a quarterly basis, and remove sedimentation to re-establish the design flow grades on an annual basis or more frequently if necessary to maintain design flow. The roads within the facility shall be designed so as to minimize the tracking of mud onto the public access road.
- G. In accordance with 30 TAC §330.19(a), the permittee shall record in the deed records of Guadalupe County, a metes and bounds description of all portions within the permit boundary on which disposal of solid waste has and/or will take place. A certified copy of the recorded document(s) shall be provided to the Executive Director in accordance with 30 TAC §330.19(b).
- H. Daily cover of the waste fill areas shall be performed with well-compacted clean earthen material that has not been in contact with garbage, rubbish, or other solid waste, or with an alternate daily cover which has been approved in accordance with 30 TAC §§330.165(d) and 305.70(k). Intermediate cover, run-on, and run-off controls shall not be constructed from soil that has been scraped up from prior daily cover or which contains waste.
- I. During construction and operation of the facility, measures shall be taken to control runoff, erosion, and sedimentation from disturbed areas. Erosion and sedimentation control measures shall be inspected and maintained at least

monthly and after each storm event that meets or exceeds the design storm event. Erosion and sedimentation controls shall remain functional until disturbed areas are stabilized with established permanent revegetation. The permittee shall maintain the on-site access road and speed bumps/mud control devices in such a manner as to minimize the buildup of mud on the access road and to maintain a safe road surface.

- J. Erosion stability measures shall be maintained on top dome surfaces and external embankment side slopes during all phases of landfill operation, closure, and post-closure care in accordance with 30 TAC §330.305(d).
- K. In compliance with the requirements of 30 TAC §330.145, the permittee shall consult with the local District Office of the Texas Department of Transportation or other authority responsible for road maintenance, as applicable, to determine standards and frequencies for litter and mud cleanup on state, county, or city maintained roads serving the site. Documentation of this consultation shall be submitted within 30 days after the permit has been issued.
- L. The permittee shall retain the right of entry onto the site until the end of the post-closure care period as required by 30 TAC §330.67(b).
- M. Inspection and entry onto the site by authorized personnel shall be allowed during the site operating life and until the end of the post-closure care period as required by §361.032 of the Texas Health and Safety Code.
- N. The provisions of this permit are severable. If any permit provision or the application of any permit provision to any circumstance is held invalid, the remainder of this permit shall not be affected.
- O. Regardless of the specific design contained in the application or adopted by reference in Attachments A and B of this permit, the permittee shall be required to meet all performance standards required by the permit, the Texas Administrative Code, and local, state, and federal laws or ordinances.
- P. The permittee shall comply with the requirements of the air permit exemption in 30 TAC §106.534, if applicable, and the applicable requirements of 30 TAC Chapters 106 and 116 and 30 TAC Chapter 330, Subchapter U.
- Q. All discharge of storm water will be in accordance with the U.S. Environmental Protection Agency NPDES requirements and/or the State of Texas TPDES requirements, as applicable.

VIII. Incorporated Regulatory Requirements

- A. The permittee shall comply with all applicable federal, state, and local regulations and shall obtain any and all other required permits prior to the beginning of any on-site improvements or construction approved by this permit.

- B. To the extent applicable, the requirements of 30 TAC Chapters 37, 281, 305, and 330 are adopted by reference and are hereby made provisions and conditions of this permit.

IX. Special Provisions

1. Water wells within the permit boundary must be plugged and abandoned in accordance with applicable state rules before physical construction may commence. A written certification that these wells were properly capped, plugged, and closed in accordance with all applicable rules and regulations of the commission or other state agency must be approved by the Executive Director before physical construction may commence.
2. Proof of a final Wetlands Mitigation Plan from the United States Army Corp of Engineers must be provided to the Executive Director before commencement of physical construction.
3. The facility must implement all roadway improvements specified in Part II, Appendix 4A of the permit application before waste may be accepted.
4. This permit provides authorization for an alternative liner design.
5. Recirculation of leachate is prohibited. Language in the Application describing this activity is hereby nullified.
6. The Site Operating Plan shall be modified to require that the facility must train all on-site employees about possible endangered or threatened species that may be found on the site.
7. The SOP shall be modified to specify the means Post Oak will use to comply with the requirement that litter scattered throughout the site will be picked up once a day on days the Facility is in operation.
8. The attached Memorandum of Understanding (MOU) between Post Oak and the United States Air Force is incorporated into, and made an enforceable part of, this permit. In the event of a conflict between the MOU and the Application, the MOU provisions shall supplement the Application and control, except as otherwise required by law.

Attachment A

Parts I through IV of the permit application.

Attachment B

Amendments, corrections, and modifications issued for MSW Permit No. 2378.

Attachment C

Memorandum of Understanding between Post Oak Clean Green Inc. and the United States Air Force

MEMORANDUM OF UNDERSTANDING
REGARDING
WILDLIFE HAZARDS MANAGEMENT

This Wildlife Hazards Management Memorandum of Understanding ("MOU") is entered into between the United States Air Force ("USAF") as represented by, the 12th Flying Training Wing ("FTW"), and the 502d Air Base Wing ("ABW"), and Joint Base San Antonio ("JBSA"), Texas and Post Oak Clean Green, Inc. ("Post Oak")

1. PURPOSE & SCOPE. This MOU identifies Bird / Wildlife Aircraft Strike Hazard ("BASH") mitigation measures Post Oak will employ to mitigate the USAF's concerns regarding the permitting and operation of the Post Oak municipal solid waste landfill, proposed TCEQ MSW Permit No. 2378, near the City of Seguin in Guadalupe County, Texas.

2. REFERENCE. Proposal for Decision dated September 23, 2016 and Draft Order; SOAH Docket No. 582-15-2498; TCEQ Docket No. 2012-0905-MSW; and proposed TCEQ MSW Permit No. 2378; and JBSA - Randolph, Joint Land Use Study, July 2015.

3. ADMINISTRATION.

Nothing in this MOU shall obligate the USAF to expend appropriations in violation of Federal Anti-deficiency laws, rules, and regulations.

Any records or documents generated as a result of this MOU shall be available to the parties to this MOU and become part of the Post Oak operating record as defined in 30 Tex. Admin. Code § 330.125 and maintained in accordance with that rule. Any request for release of records associated with the implementation of this MOU to anyone outside the parties must be determined based on applicable laws. The USAF cannot agree to maintain the confidentiality of information received from Post Oak except to the extent permitted under the Freedom of Information Act or the Privacy Act.

4. RESPONSIBILITIES. In consideration of the USAF withdrawing the objections and concerns it previously raised to the TCEQ concerning the proposed TCEQ MSW Permit No. 2378 and consistent with Section III.M of said permit, which states: "The facility shall be properly supervised to assure that the attraction of birds does not cause a significant hazard to low-flying aircraft and that appropriate control procedures will be followed." and "[a]ny increase in bird activity that might be hazardous to safe aircraft operations will require prompt mitigation actions." Post Oak acknowledges the sufficiency of the consideration and agrees to:

a. Retain services of a US Department of Agriculture ("USDA") wildlife hazard management biologist with appropriate US Fish and Wildlife Service ("USFW") certifications through contract or employment and at Post Oak's exclusive expense ("Post Oak's biologist") to undertake or direct actions to keep large numbers of birds away from the landfill site, track bird trends, and conduct predictive bird modeling, as deemed needed by the wildlife hazard management biologist.

b. Periodically and at a minimum, semi-annually, Post Oak's biologist will coordinate with the USDA wildlife biologist at the 12 FTW.

c. If, at any time, a large number of birds, (including but not limited to vultures, hawks, gulls, mixed blackbird species, egrets, etc.) are observed on or within of 500 yards of the landfill waste placement footprint, Post Oak will notify the Seguin Runway Supervisory Unit (primary)

or 12 FTW Safety Office (secondary) as to the location of the large number of birds.

d. Post Oak's biologist will identify possible synergistic effects, if any, between the landfill and surrounding land uses that may increase the threat of bird strikes to aviation. For example, nearby roosts (including but not limited to cell towers, power line towers, etc.) that may cause birds to traverse between roost sites and the landfill site. Post Oak will work with such property owners in an attempt to minimize the synergistic effects of the identified land uses.

e. Post Oak will maintain a robust program to minimize the attractiveness of the landfill to birds and predatory wildlife species. As deemed appropriate and necessary by Post Oak's biologist, Post Oak will employ auditory harassment techniques, various pyrotechnics, propane cannon systems, etc. and consider additional methods, such as the use of methyl anthranilate and the Long Range Acoustic Device (LRAD), to disperse/deter identified bird populations. As authorized and needed, Post Oak will employ lethal and non-lethal means.

f. Post Oak will not plant trees or shrubs that attract or accommodate bird nesting or roosting, and will maintain or remove existing trees or shrubs, as needed, to limit nesting or roosting sites as allowed by any applicable state or federal regulatory limitations.

g. Post Oak will plant grasses that deter birds from gathering at the site and maintain grass height between seventeen and fourteen inches (7"-14") in the inactive areas of the landfill, subject to weather and growing conditions at the site. Post Oak will not be expected to irrigate inactive areas to supplement natural conditions or rainfall.

h. Post Oak will minimize the surface area of the active face and employ daily cover as required by TCEQ's rules and proposed TCEQ MSW Permit No. 2378.

i. Post Oak will eliminate standing water in areas of the landfill as required by TCEQ's rules and proposed TCEQ MSW Permit No. 2378.

j. Post Oak will incorporate anti-perching devices and bird harassment measures into all on-site structures (including but not limited to buildings, signs, etc.), where practical.

k. Post Oak will install and maintain a perimeter fence around the site designed to keep medium to large mammals (including but not limited to hogs, coyotes, deer, canines, felines, etc.) from entering and disturbing daily cover.

l. Post Oak will continue to pursue twenty four hours a day – seven days a week (24-7) operating hours for the landfill to allow landfill operations the ability to avoid the USAF's peak flight training hours (9 am to 4 pm, Monday - Friday) by expanding the time for landfill waste disposal operations outside the USAF's peak flight training hours.

m. Post Oak agrees to install a bird radar system at the landfill site at a cost not to exceed \$600,000 to facilitate the monitoring of bird movements in real time and further the development of bird activity trends. The bird radar feed will be made available to the 12 FTW to aid in risk identification and mitigation. Post Oak will also spend up to \$25,000 per year for maintenance of the bird radar system. If agreed to by USAF, this requirement may be removed as technology or training equipment improves in the future.

n. Post Oak will be responsible for any and all permits and authorizations required by law to undertake these activities herein.

5. EDUCATION AND AWARENESS. In addition to Post Oak's biologist, Post Oak employees will be trained to identify and report bird activities and groups of birds at the site. Post Oak will meet with USAF as requested to discuss these BASH mitigation efforts and otherwise foster open communication and coordinated efforts.

6. DISPUTE RESOLUTION.

In the event of a dispute, claim, question or disagreement arising from or relating to this MOU, the parties shall use their best efforts to settle the dispute, claim, question, or disagreement. To this effect, the parties shall consult and negotiate with each other in good faith and, recognizing their mutual interests, attempt to reason a just and equitable solution satisfactory to both parties.

If a dispute, claim, question or disagreement cannot be settled through negotiation, the parties agree to try in good faith to settle the dispute, claim, question or disagreement through mediation administered by the American Arbitration Association or similar professional mediation organization mutually agreed to by the parties. The parties will share the costs of mediation equally. Any party refusing to mediate shall not prevent the other party from pursuing their claims to arbitration. Nothing herein will be construed to prevent any party's use of injunction, and/or other prejudgment or provisional action or remedy. Any such action or remedy will not waive the moving party's right to compel arbitration of any dispute.

If the dispute, claim, question, or disagreement cannot be resolved through mediation, the parties agree that the dispute shall be referred to arbitration in accordance with American Arbitration Association's Rules of Arbitration. The arbitrator's decision shall be final and binding and judgment may be entered thereon. In the event a party fails to proceed with arbitration, unsuccessfully challenges the arbitrator's award, or fails to comply with arbitrator's award, the other party is entitled of costs of suit including a reasonable attorney's fee for having to compel arbitration or defend or enforce the award.

7. POINTS OF CONTACT.

For the USAF

Chief of Safety
12th Flying Training Wing
Joint Base San Antonio - Randolph, TX, 78150
(210) 652-3308


For Post Oak Clean Green, Inc.

John A. Riley
KELLEY DRYE / JACKSON GILMOUR & DOBBS
1115 San Jacinto Blvd., Suite 275, Austin, Texas 78701

8. APPROVALS/ SIGNATURES. By signing below, each party acknowledges he or she is an authorized agent or representative of their respective organizations and have the legal authority to enter into this MOU and to bind their respective organizations, their successors in interest, agents, and assigns. By signing below, each party agrees to be bound by the terms of this MOU. The parties acknowledge that this MOU shall be provided to TCEQ for TCEO's consideration in granting the proposed TCEQ MSW Permit No. 2378 or any other TCEQ municipal solid waste permit associated with the operations of the landfill at issue.

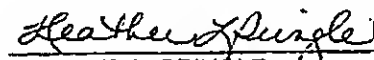
THIS MOU CONTAINS A BINDING ARBITRATION PROVISION WHICH MAY BE ENFORCED
BY THE PARTIES.

For the 12th FLYING TRAINING WING


JOËL L. CAREY, Colonel, USA
Commander

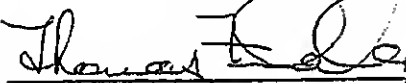
22 Dec 2016
date

For the 502nd AIR BASE WING and Joint Base San Antonio


HEATHER L. PRINGLE
Brigadier General, USAF
Commander

22 Dec 2016
date

For Post Oak Clean Green, Inc.


Thomas Funderburg
President

22 Dec 2016
date